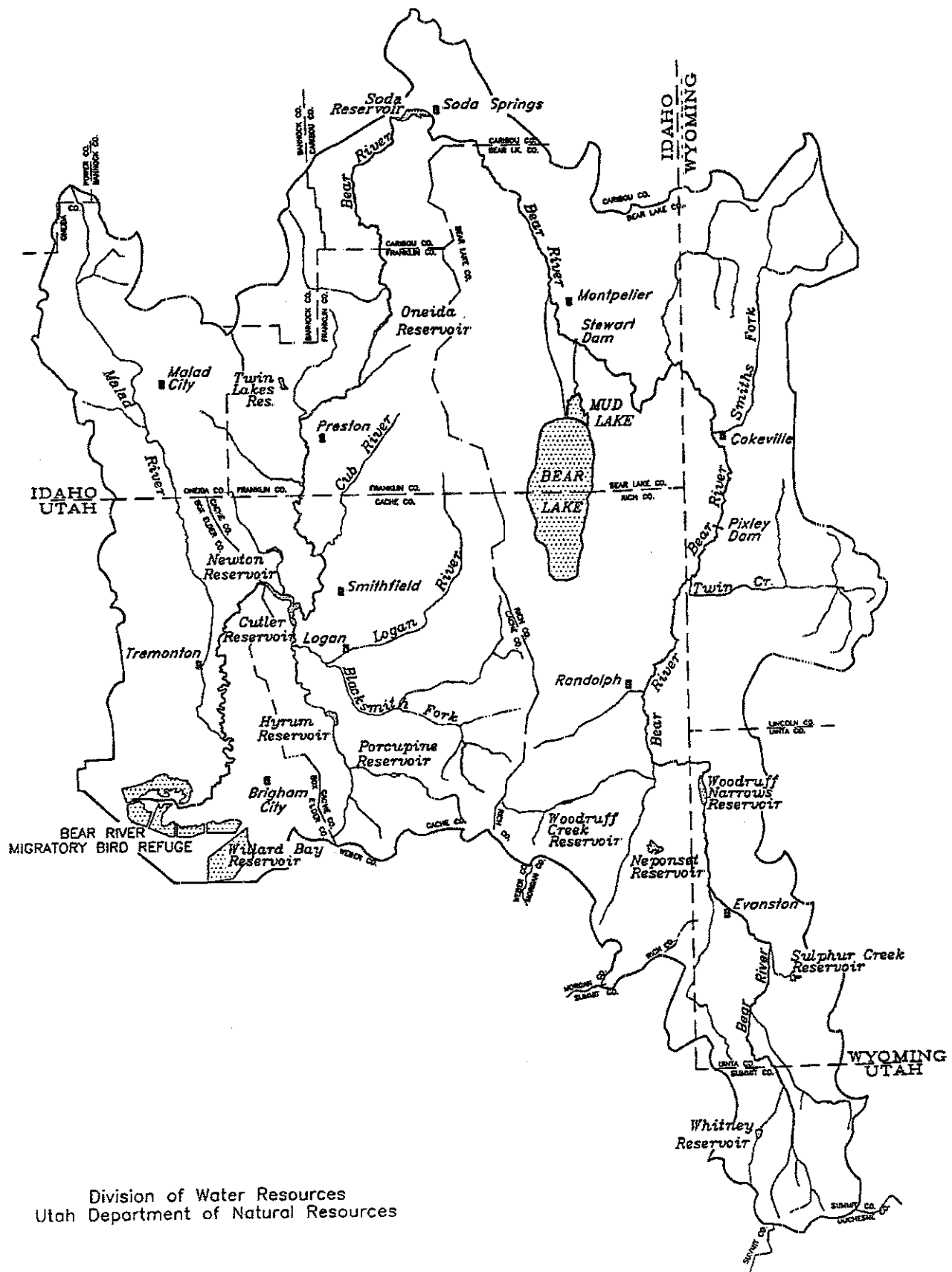
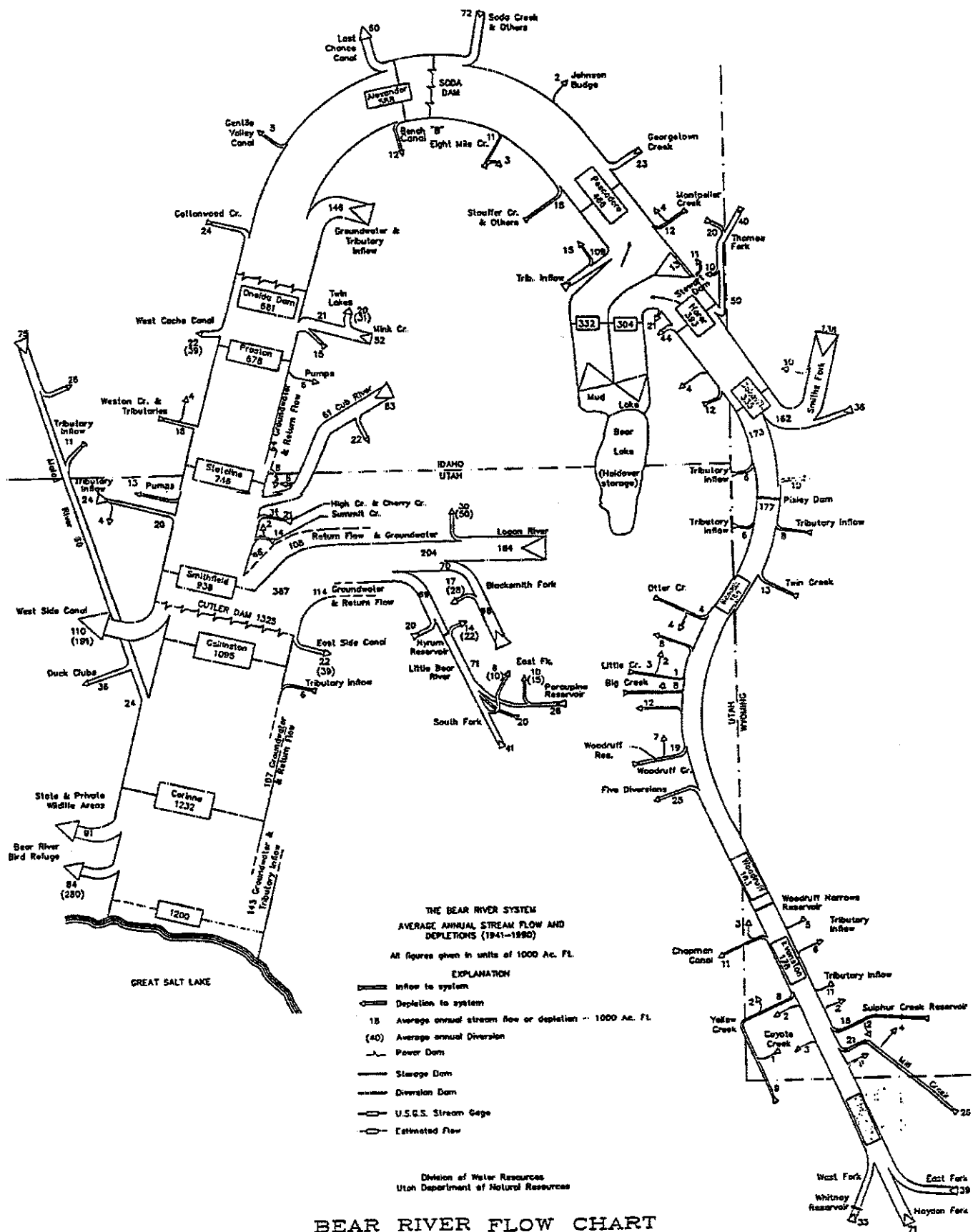


BEAR RIVER BASIN MAP



Division of Water Resources
Utah Department of Natural Resources



EXPANDED NATURAL RESOURCES INTERIM COMMITTEE

OCTOBER 14, 2004

BEAR RIVER REPORT

By Rep. Eulalie Teichert Langford

SENATOR ROBERT L. GEDDES, reporting to this committee in August 2004, stated that although the current drought has caused water shortages in the Bear River drainage, there have been few serious challenges in managing Bear River's water. Today, I will explore with you why this is the case.

1995 BEAR LAKE SETTLEMENT AGREEMENT: Recently, I attended the annual Bear Lake Eco Symposium. Presenters at that meeting included irrigators and their lawyers, Utah Power and Light officials and their lawyers, environmental groups, homeowners, and learned researchers who recently conducted a five year United States Geological Survey study of Bear Lake. Many of the presenters commented, just as Senator Geddes did, that managing the water in the Bear River drainage during the current drought had been comparatively harmonious. Several of the presenters—including the Federally appointed Chairman of the Bear River Commission, a lawyer for the irrigators, and a lawyer for the power company-- gave credit to the 1995 Bear Lake Settlement Agreement. That being the case, I will explain the background and provisions of that document. (An interesting side-note of concern to all involved in future water management and planning is that USGS scientist Dr. Joseph G. Rosenbaum stated that their very recent study of Bear Lake, spanning thousands of years, shows that the Twentieth Century was the wettest period in the last five hundred years! That should give us pause.)

GROUND WATER VS. SURFACE WATER: This committee is focusing its attention primarily on ground water. Because ground water and surface water are interrelated and one impacts the other, the focus of this report will be largely surface water and its impact on the economy of the Bear River drainage.

BEAR RIVER AND BEAR LAKE: In order for you to understand the pivotal role that Bear Lake plays in the Bear River drainage, allow me to give a brief, but long-term, history of that relationship. When white men discovered the Bear Lake Valley, Bear River and Bear Lake were not connected except that the overflow from Bear Lake's two natural outlets flowed into Bear River. There was no inflow of Bear River water into Bear Lake.

34,000 YEARS AGO volcanoes changed the course of Bear River, caused the Bonneville Flood, and gave the southern portion of present day Caribou County some of the richest farming land in the state. Before that event, Bear River flowed into the Portneuf and thence into the Snake River. The lava flows from the erupting volcanoes blocked the historic path of Bear River and forced it to turn south near present day Soda Springs and into the Great Basin and ancient Lake Bonneville. Eventually the natural dam that restrained Lake Bonneville overtopped at Red Rock Pass in present day south Bannock County. That flood sent tons of earth, huge boulders, and other debris cascading down Snake River. The boulders deposited by that flood are apparent all along the Snake River plain to this day. As Lake Bonneville receded, it became much smaller—the only remnant that we see today is Great Salt Lake. However, the ancient shoreline of Lake Bonneville is still visible on the mountainsides along the Wasatch Front. The volcanic ash that settled upon the surrounding area is visible in the Grace area of Caribou County as a thick layer of rich, black topsoil. Excellent soil for growing crops, but high on a sagebrush plain with no reliable source of water close at hand.

FIRST FILING ON BEAR LAKE WATER occurred in 1889 when a resident of Box Elder County, Utah, recorded his claim at the Bear Lake County Courthouse in Paris and posted a notice at the outlet of Bear Lake stating that he claimed all the water in the lake and all the water flowing into the lake. At that time, there was no way to get the water out of the lake. Nevertheless, the claim was duly recorded and remains a matter of record to this day. It is worth noting that a large portion of the water released from Bear Lake at this time goes to Box Elder County, Utah. First in time first in right!

THE LAST CHANCE CANAL is a masterpiece of engineering and a tribute to the ingenuity, hard-work, and perseverance of the early pioneers who settled Grace. Using the tools available in the 1890s, they manage to carve a tunnel through solid rock and construct an aqueduct across a steep ravine to transport Bear River water to their fertile fields.

STEWART DAM AND THE RAINBOW CANAL: The idea of using Bear Lake as a storage reservoir was conceived late in the 19th century. In 1912, Telluride Power Company began construction of a canal to be used for diverting Bear River water into Bear Lake for storage for the purpose of producing hydro-power. The project, completed in 1918, includes Stewart Dam to divert all of the water of Bear River into Bear Lake via the Rainbow Canal. The outlet canal carries the stored water back into Bear River. Lifton Pumping Station, located at the north end of Bear Lake, discharges water into the outlet canal. When the lake is full, the water flows through Lifton Pumping Station by gravity. As the elevation of the lake lowers, pumping becomes necessary. At 5,923.65 feet above sea level, the lake is full and has a surface area of 70,000 acres. Downstream are five hydro-plants where electricity is generated. All of the above now belongs to Utah Power, aka PacifiCorp, aka Scottish Power.

THE 1922 DIETRICH DECREE established many water rights and settled a claim brought by The Last Chance Canal Company. Because the natural outlets that allowed water to flow from Bear Lake were shallow, they froze solid during the winter stopping the flow of water. When spring came and the ice melted, there was a sudden rush of water from Bear Lake into Bear River. Stockholders in the Last Chance Canal Company depended on this water. With the construction of the Lifton Pumping Station on Bear Lake, the natural outlets from Bear Lake were permanently closed—depriving the Last Chance Canal Company and other downstream water-users of the spring runoff upon which they depended. The final settlement of the Dietrich Decree awarded the Last Chance Canal Company and other downstream claimants the following to compensate for lost natural flow from Bear Lake: Each year from April 20th to July 1st, 50 cfs.; July 1st to July 15th, 35 cfs.; July 16th to Aug. 1st, 25 cfs.; Aug. 1st to Sept. 15th, 15cfs

THE BEAR RIVER COMPACT, brought into being in 1958 by the combined approval of the state legislatures of Utah, Wyoming, and Idaho, by act of Congress, by signature of President Eisenhower, and amended during the Carter Administration, governs the operation of Bear River. For management purposes, the Compact divides the river into three segments—Upper, Central, and Lower Divisions. The Bear River Commission, made up of three members from each of the Compact states, a chairman appointed by the President of the United States, and an engineer/manager, manages the day-to-day operation of the river.

THE UPPER DIVISION extends from the headwaters of the river in Utah to Pixley Dam in Wyoming. Beginning in the high Uintah Mountains in Utah, Bear River flows north into Wyoming near Evanston, continues northward through Woodruff Narrows Reservoir, past the communities of Woodruff and Randolph in Utah, then flows back into Wyoming upstream from Pixley Dam, ten miles south of Cokeville, Wyoming.

THE CENTRAL DIVISION is the stretch of river between Pixley Dam and Stewart Dam. Smith's Fork flows into Bear River near the town of Cokeville, doubling the volume of water in the river. At the town of Border, Wyoming, the river turns westward into Idaho. The volume of water in the river increases again by the inflow of Thomas Fork in Idaho. At Stewart Dam all of the water in Bear River is diverted into Bear Lake for storage.

THE LOWER DIVISION extends from Stewart Dam in Idaho to Great Salt Lake. After leaving Bear Lake, the river continues to its northern most point in Caribou County. Here Alexander Reservoir and the Soda hydro-plant play an important role. Turning immediately south in its rush toward Great Salt Lake, Bear River travels through a tunnel and across an aqueduct created by the Last Chance Canal Company and the ingenuity of 19th century pioneers, through the Grace and Cove hydro-plants, into Oneida Reservoir and through the Oneida hydro-plant in Franklin County. Bear River leaves Idaho near the town of Franklin and continues on to Cutler Reservoir and hydro-plant. Much of the water released from Bear Lake goes to the Bear River Canal Company in Box Elder County, Utah. Before flowing into Great Salt Lake, Bear River supplies water for the Bear River National Bird Refuge near Brigham City.

USING BEAR LAKE FOR FLOOD CONTROL: In order to settle a lawsuit in the 1970s, Utah Power was ordered to keep Bear River within its banks. Without public input, Utah Power determined that to accomplish this water must be released from Bear Lake in the fall of the year to make room for the spring runoff. This is done whenever the elevation of Bear Lake is above 5,918 feet above sea level at the close of the irrigation season. The most recent releases occurred in 1997, '98, '99. During such releases and during the following winters, the run-of-the-river is sent downstream along with the surface water removed from Bear Lake. Had no releases occurred in the 1990s, we know that the elevation of Bear Lake would be more that four feet higher than it now is. All of this water finds its way to Great Salt Lake where the principle beneficiary is the Great Salt Lake ecosystem.

Here the important role of The Bear River Compact and the 1995 Bear Lake Settlement Agreement are apparent. Under The Compact, Woodruff Narrows reservoir in the Upper Division is not allowed to fill whenever the elevation of Bear Lake is below 5,911 feet above sea level—affecting both the ground and surface water in that area. When Woodruff Narrows Reservoir is not full, no water is available for irrigation in the ten mile stretch of river between Pixley Dam and Cokeville, Wyoming, in the Central Division. Irrigators in that area have no water for their crops. By this, we see that lowering the elevation of Bear Lake, which is the Lower Division, impacts water-users in the Upper and Central Divisions.

According to the terms of The Settlement Agreement, when Bear Lake is at or above 5,914 feet in elevation as of March 1st, 245,000 acre feet of water may be released, if needed, for irrigation that year. As the elevation of Bear Lake goes down, releases for irrigation take place on a diminishing scale down to elevation 5,905 when only 55,000 acre feet of water may be released that year. When Bear Lake reaches an elevation 5,904 or below no water will be allocated. Based on that

formula, unless the elevation of Bear Lake rises between now and March 1st no water will be released during the 2005 irrigation season. Here we see, that lowering the elevation of Bear Lake in the Idaho portion of the Lower Division, impacts water-users in both Idaho and Utah. In short, Bear Lake is the key to availability of water throughout the entire Bear River drainage. It is obvious that releasing water from Bear Lake for flood control adversely impacts the economy of the entire region.

FLOOD CONTROL ABOVE BEAR LAKE: Is it possible that if all of the water sent downstream from Bear Lake and Bear River in the name of flood control over the past thirty-four years were stored in Bear Lake that the lake would now be full or nearly full? What are the benefits of providing flood control? Are there sites where flood control could be provided? What are the costs and benefits involved? There is an opportunity to operate the entire river system in tandem with Bear Lake and in a manner that will minimize the fluctuation of the lake. The opportunity and the benefits thereby derived must be identified. In order to make good, long-term decisions for the lake, the public needs this information.

Flood control above Bear Lake would make possible a policy that Bear Lake would be "first to fill and last to empty." Benefits would include:

MORE WATER FOR IRRIGATION: Keeping the elevation of Bear Lake above 5,914 feet above sea level would guarantee a release of 245,000 acre feet of water, if needed, every year for downstream irrigation.

MINIMIZE FLUCTUATION OF LAKE LEVELS: 80% of the rocky area where many of Bear Lake's endemic species spawn is lost when the lake is low. Lowered lake levels encourage infestations of undesirable plant growth along the lake.

IMPROVED SPAWNING HABITAT FOR BEAR LAKE CUTTHROAT TROUT: Wide expanses of exposed beach leave spawners vulnerable to predators. In 2004, no fish were able to make their way upstream to spawn from the Idaho portion of Bear Lake.

BOAT-LAUNCHING CAPABILITY AT IDAHO STATE PARKS: For the past three years no boats could launch in the Idaho portion of Bear Lake. This caused a 50% drop in visitors—negatively impacting revenue to the parks and to the local economy.

ALLOW FILLING OF WOODRUFF NARROWS RESERVOIR: The Bear River Compact allows this reservoir to fill only when the elevation of Bear Lake is above 5,911 feet above sea level.

Flood control above Bear Lake will greatly benefit the economy of all three states in the Bear River drainage—Utah, Wyoming, and Idaho. We must include our sister states in efforts to achieve this goal. Recent meetings with Congressional staffers have included invitations to the Congressional delegations of Wyoming and Utah.

THE UNITED STATES ARMY CORPS OF ENGINEERS is the federal agency responsible for flood control. They have indicated a willingness to conduct a feasibility study that will answer our questions. Costs of the study range from \$600,000 to \$2,000,000 depending upon whether the study would include the area immediately above Bear Lake—the Rocky Point site—or a basin wide study. Studies of this sort require a 50/50 match—fifty percent federal and fifty percent non-federal funds. With congressional approval, past local expenditures may be used as part of the local match. The Bear Lake Regional Commission has spent over four million dollars in state and local funds for studies of Bear Lake and Bear River during the last thirty-four years. Concerned citizens of the Bear River drainage, including the Bear Lake County Commissioners, the Bear Lake Regional Commission, Lake Watch, Inc., and Love Bear Lake, Inc., are asking for Congressional approval for use of part of those past expenditures as the local match to make the Corps of Engineers feasibility study possible.

CONCURRENT RESOLUTION TO CONGRESS: In view of all of the above, I am asking for a motion from this committee recommending that the Legislature of the State of Idaho send a concurrent resolution to Congress asking that legislation be introduced in the United States Congress that will allow a United States Army Corps of Engineers feasibility study of the benefits of flood control above Bear Lake and that past local expenditures be allowed for the 50% local match



**BEAR LAKE COUNTY
BOARD OF COMMISSIONERS**

DON C. CLARK
Chairman - Georgetown

DWIGHT L. COCHRAN
Montpelier

CONRAD E. MICHAELSON
St. Charles

JOAN P. EBORN - CLERK

July 22, 2004

The Honorable Mike Crapo
801 East Sherman, Suite 178
Pocatello, ID 83201

Dear Senator Crapo,

Water is the life blood of the state of Idaho. It is imperative that we do everything possible to conserve, preserve and utilize the water to which the state is entitled. The Bear River drainage in southeastern Idaho is no exception. During these last few drought years, we realize how much we might have conserved if we had followed a different course of action.

This letter is a request to you and the other congressional delegates from Idaho to fund a Corp of Engineers study of possible water storage sites upstream of Bear Lake, which could be used for flood control of the Bear River. At present, several hundred thousand acre feet of water could still be in Bear Lake to mitigate the effects of the drought if we had alternative storage sites.

Idaho is entitled to store approximately 125,000 acre-feet annually and Utah about 390,000 acre-feet annually under the terms of the Bear River Compact. This water, which is usually available during the spring runoff could be stored and prevent any flooding of the Bear River. The water could then be used for irrigation, domestic and commercial development and recreation. Without it we are at an economic standstill.

The study is estimated to cost about half a million dollars. Half of that amount must be a local match. With Congressional approval the monies already spent by local organizations could be used as the match.

Please work with our other congressional delegates and with the congressional delegates from Utah and Wyoming to provide the funding to the Corp of Engineers to do this study as soon as possible. A flood control/water storage facility would be enormously beneficial to the safety, security, economic and environmental welfare of the citizens of the Bear River drainage. Thank you for your cooperation.

Sincerely,

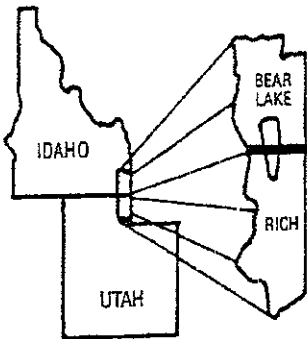
BEAR LAKE COUNTY COMMISSIONERS

DON C. CLARK, Chairman

DWIGHT L. COCHRAN

CONRAD MICHAELSON

P.O. BOX 190, PARIS, IDAHO 83261 (208) 945-2236



Bear Lake Regional Commission

2661 U S 89, P.O. Box 26, Fish Haven ID 83287 - (208) 945-2333 - Fax (208) 945-2072



October 30, 2002

Idaho Water Resources Board
1301 North Orchard Street
Boise, ID 83706

Re: Rocky Point Dam

ATTN: Mr. Joseph L. Jordan

Dear Sirs:

The Bear Lake Regional Commission has been on record for several years in supporting water storage on Bear River above Bear Lake. Due to the long time frame for a project of this magnitude to be developed the commission members feel we need to start the preliminary process of a feasibility study to be conducted by the Army Corps of Engineers. The Bear Lake Regional Commission respectfully requests the support of the Idaho Department of Water Resources for the Corps of Engineers to do the feasibility study.

The Corps of Engineers study of the beneficial effects of flood control above Bear Lake is badly needed. Bear Lake is the major reservoir for containing floodwaters of the Bear River but it is inadequate for this purpose. It is also an outstanding water resource that is threatened by its continued use for flood control. We feel that it is the responsibility of the Bear Lake Regional Commission and the states of Idaho and Utah to protect this resource.

As a result of two 1970's lawsuits against Utah Power and Light Co. regarding damage to crops due to flooding along Bear River, the power company is under court order to keep Bear River within its banks. Consequentially, when the irrigation season ends with Bear Lake above 5918 feet in elevation, water is released downstream to make room in Bear Lake for the spring runoff. Since 1970, millions of acre-feet of water have been released to provide capacity for flood control. If that water were kept in Bear Lake, the lake would now be full or nearly full. There would be no need to pump water out of Bear Lake for irrigation; it would flow out by gravity. There would be no need to dredge in Bear Lake, the elevation of the lake would be high enough to make dredging unnecessary. Under the Compact, an elevation above 5911 feet would allow upstream storage at the Woodruff Narrows Reservoir.

According to scientific reports by Dr. Vincent Lamarra, during the spring run-off upwards of 200 tons per day of suspended sediment solids are carried to and deposited in Bear Lake from Bear River (Lamarra's report to the Bear Lake Regional Commission 1994-95). This is the result of using the lake for flood control and is highly detrimental to this ecosystem. In his report to the Bear Lake Regional Commission in January 1999, Dr. Lamarra reported that he is seeing an increase in algae blooms on Bear Lake due to the nitrates being carried in from Mud Lake and Bear River (1998 Lamarra report to Bear Lake Regional Commission). A reservoir above Bear Lake would allow the chemicals to be neutralized and suspended solids to settle out that are now entering Bear Lake.

There is significant economic justification for the dam as well. Under the Bear River Compact, Idaho is allowed to store an additional 125,000 acre-feet of water each year. This water is desperately needed to allow residential, commercial and municipal development in the Bear River drainage without reducing irrigated agricultural lands.

A comprehensive feasibility study by the Corps of Engineers is required. If it is determined that flood control above Bear Lake would be beneficial, the Corps of Engineers would pay upwards of 65% of the cost of construction of the flood control structure. The other 35% of cost must come from a non-federal source, preferably state or county government. Revenue bonds are an option with the debt paid by the sale of electricity produced from the hydro plant located at the proposed dam and the sale of uncommitted water to municipalities to generate income to pay for the construction. Once the debt was paid, income from the hydro plant and water sales would provide an ongoing source of revenue to the entity that funded the project and would far exceed lost revenue due to land removed from the tax base for this project.

Once again the Bear Lake Regional Commission is requesting support for this project by the Idaho Department of Water Resources so that the study by the Army Corps of Engineers could go forward.

Sincerely,

Norman A. Weston

Norman A. Weston, Chairman

cc: Governor Dirk Kempthorne

Larry Anderson, Utah Department of Water Resources

Karl Dreher, Director, Idaho Department of Water Resources

Braton Willis, Army Corps of Engineers, Walla Walla District

Scott Stoddard, Army Corps of Engineers, Sacramento District

EULALIE TEICHERT LANGFORD
DISTRICT 31-B
BEAR LAKE CARIBOU, FRANKLIN
BONNEVILLE & TETON COUNTIES

HOME ADDRESS
P.O. BOX 386
MONTPELIER, IDAHO 83254
HOME (208) 847-1732



COMMITTEES
AGRICULTURAL AFFAIRS
STATE AFFAIRS

House of Representatives State of Idaho

July 9, 2004

The Honorable Mike Simpson
United States Congress
801 East Sherman Street, Room 194
Pocatello, ID 83201

Re: U. S. Army Corps of Engineers Study

Dear Congressman Simpson,

Water is our most valuable natural resource. We must manage it wisely. The economy of the entire State of Idaho is dependent on an adequate supply of water. The on-going drought is having a negative impact--especially in the Bear River drainage. Recent statistics make it obvious that Bear Lake, Caribou, and Franklin Counties are suffering due to too little stored water for irrigation. Part of the problem is that Bear Lake is used for flood control. Because of this practice hundreds of thousands of acre feet of Bear Lake water were released downstream into Great Salt Lake over the past thirty years.

Flood control above Bear Lake would help. This would allow us to adopt a policy that Bear Lake would be the "first to fill and last to empty." A Corps of Engineers study is needed to determine how much water would be in Bear Lake now if such a policy had been in place for the past thirty years. The study is also necessary to determine the most viable method and location for providing flood control.

A full Bear Lake would improve the economy and the ecology of all of southeast Idaho. In order to make that happen, we need the Corps of Engineers study. This study must be all-inclusive and take into consideration all sights above Bear Lake where upstream flood control would be possible. The cost of such a study could be as much as \$600,000. Half of that must be a local match. With congressional approval, past expenditures for studies of Bear Lake and Bear River could be counted toward the local match.

Legislation that will allow past expenditures to be used as the local match for the U. S. Army Corps of Engineers study of flood control above Bear Lake is urgently needed. I urge you to introduce it at the earliest possible date.

Thank you.

Yours for good government,

A handwritten signature in cursive script that reads "Eulalie Teichert Langford".
Eulalie Teichert Langford

c: Senator Craig, Senator Crapo, Bear Lake County Commissioners, Bear Lake Regional Commission,
Saint Charles/Fish Haven Group, Last Chance Canal Company.

Ken Bain, President
LOVE BEAR LAKE, INC.
P. O. Box 61
Saint Charles, Idaho 83272
July 9, 2004

Senator Larry E. Craig
801 East Sherman Street
Pocatello, ID 83201

Senator Mike Crapo
801 East Sherman, Suite 178
Pocatello, ID 83201

Congressman Mike Simpson
801 East Sherman, Room 194
Pocatello, ID 83201

Honorable Gentlemen,

I am writing you regarding the urgent need for a Corps of Engineers study that will determine the amount of water that could be saved by providing flood control above Bear Lake. The present practice of releasing water downstream for flood control sends thousands of acre feet of water into Great Salt Lake. This does not benefit the Idaho economy. There is a better way to use this water.

A Corps of Engineers study would tell us how much water has been released in this way, how much water would be in Bear Lake if all of that water had been saved, and the best method and location for accomplishing flood control above Bear Lake

We are in the midst of a terrible drought. Bear Lake is at the lowest elevation since 1934. The impact is being felt by all-irrigators, the environment, the entire economy of this area. A plan that would make Bear Lake "first to fill and last to empty" would benefit everyone with an interest in the lake.

In recent conversations with the Corps of Engineers, we are told that studies of this kind are costing between 500 and 600,000 dollars. Half of that amount must be a local match. With Congressional approval local moneys already spent in studying Bear Lake and Bear River can be credited for the local match. I urge you to introduce legislation that will make that possible.

Thank you!

Sincerely,



Ken Bain

c: Idaho Water Resource Board, Bear River Commission, Bear Lake County Commission, Bear Lake Regional Commission, Saint Charles/Fish Haven Group, Last Chance Canal Company.

Ken Bain, President
LOVE BEAR LAKE, INC.
P. O. Box 61
Saint Charles, Idaho 83254
July 9, 2004

Mr. Jerry Rigby, Chairman
Idaho Water Resource Board
1301 North Orchard Street
Boise, ID 83706

Dear Chairman Rigby and Board Members,

Water is Idaho's most precious natural resource. The release of thousands of acre feet of Bear Lake water into Great Salt Lake is not the best use of that resource.

My letter to our congressional delegation is enclosed for your information. A similar letter from your board would be useful.

Thank you for your help.

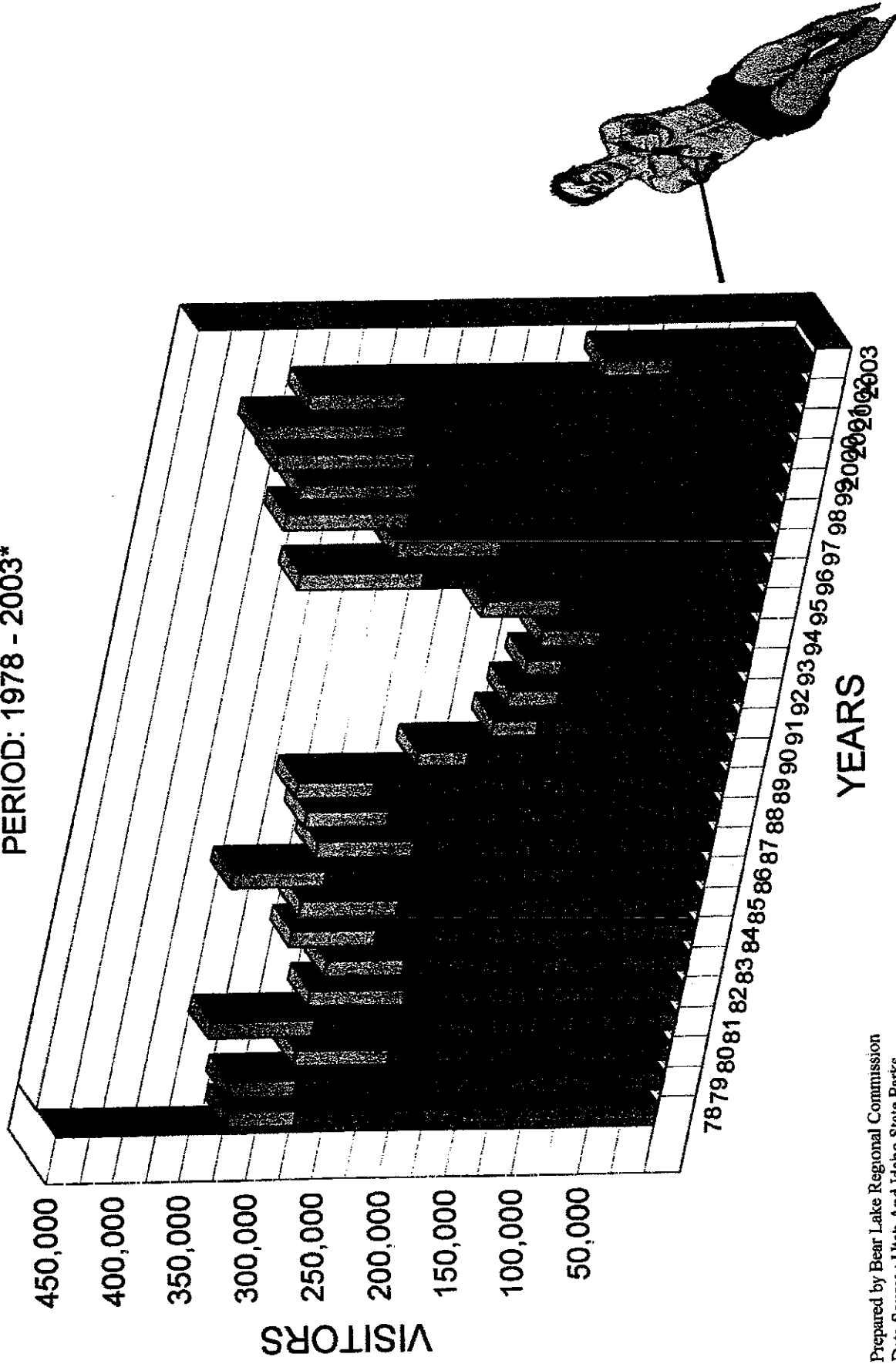
Sincerely,

A handwritten signature in cursive script that reads "Ken Bain".

Ken Bain

BEAR LAKE STATE PARK VISITATION

PERIOD: 1978 - 2003*



Prepared by Bear Lake Regional Commission
Data Source : Utah And Idaho State Parks
* Through Oct 2003

Bear Lake State Parks Visitation

Period 1978-2003 Source Utah & Idaho state parks data.

YEAR	UTAH	IDAHO	TOTAL
78	272223	50720	322943
79	275921	51791	327712
80	210605	71131	281736
81	272225	77786	350011
82	207978	72557	280535
83	213203	59701	272904
84	238798	64348	303146
85	227565	73635	301200
86	286787	70500	357287
87	224694	73097	297791
88	248234	62576	310810
89	264206	58000	322206
90	197833	38500	236333
91	149663	33738	183401
92	139280	37580	176860
93	141331	26454	167785
94	115896	45545	161441
95	151822	58057	209879
96	259471	93211	352682
97	205152	80177	285329
98	279731	93172	372903
99	278551	88384	363829
2000	284806	104020	388826
2001	296774	109893	406667
2002	300534	73405	373939
2003	105730	49826	155556

visitation was down in parks because Bear Lake
had open access all around the lake shore
*Lake level lowest in 30 years due to drought
*ID camping up 42%